Date: Wed, 14 Sep 94 04:30:25 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #306
To: Ham-Digital

Ham-Digital Digest Wed, 14 Sep 94 Volume 94 : Issue 306

Today's Topics:

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

Date: Sat, 10 Sep 1994 17:29:00 GMT
From: agate!howland.reston.ans.net!EU.net!sun4nl!knowar!NewsWatcher!user@ames.arpa
Subject: [Q] packet TV; broadband IP coder to TV signal?
To: ham-digital@ucsd.edu

Have there been any experiments;

It resembles VCR backup for digital data.

A minimal packet would be a bitstream encoded into a regular TV signal
frame with sync, error correction, address etc. . Maybe some teletekst(see
note) technology could be used for this not only for the top video lines
but for the whole "picture" frame / packet.

NOTE: Teletekst is a system wich uses the top video lines (invisible) to

broadcast digital data to all tv sets continuously; the user selects from
the carrousel pages to read.

PE1BFE

Date: 13 Sep 94 21:39:53 GMT
From: news-mail-gateway@ucsd.edu
Subject: DX Cluster on Internet
To: ham-digital@ucsd.edu

Well Im not infavour of this..
what ever happend to CQ CQ CQ and tuning about ??
Now with Internet connect and DX Clusters You can simply
go to a DX spot connect on the Internet join the DX cluster
Announce to All Im on 14.045 or 28.675 what ever
And setup the skeds.
What a Cheet Hi Hi..
Ill try it next time im on St.Kilda VR18g and Op on 144 or 432Mhz.
Barry GM8SAU/DC0HK..

Date: Sat, 10 Sep 1994 17:41:20 GMT
From: agate!spool.mu.edu!news.clark.edu!netnews.nwnet.net!chena.alaska.edu!
raven.alaska.edu!ftpam.uafsoe.alaska.edu!ftpam@ames.arpa
Subject: HDLC protocol chips
To: ham-digital@ucsd.edu

In article <34mb4g$7n9@news.u.washington.edu> kenth@u.washington.edu (Kent Hill)
writes:
>Path: raven.alaska.edu!chena.alaska.edu!netnews.nwnet.net!news.u.washington.edu!
kenth
>From: kenth@u.washington.edu (Kent Hill)
>Newsgroups: rec.radio.amateur.digital.misc
>Subject: HDLC protocol chips
>Date: 8 Sep 1994 06:31:44 GMT
>Organization: University of Washington, Seattle
>Lines: 19
>Sender: kenth@u.washinton.edu
>Message-ID: <34mb4g$7n9@news.u.washington.edu>
>NNTP-Posting-Host: carson.u.washington.edu

>
>I've been working on a homebrew tnc design for a while to convert an old 8-bit
>atari to a tnc. I had designed the system around using a Western Digital 1933

>HDLC chip, but when I went to buy one about a year ago, WD told me they don't
>make it any more. Soo.. after looking around I thought Zilogs Z8530 (as used
>in other TNCs) should work, but when I tried to call them to get the technical
>specs the numbers I found for them didn't work (ok i got them out of 1983
>book). The Motorola 6854 doesn't have an internal PLL clocking mode. Does
>any one know where I can either

>1. Get a wd1933 with specs
>   or
>2. Get a hold of Zilog
>   or
>3. Another chip that might work?

>Thanks for the help

>kenth@u.washinton.edu

Advanced Micro Devices also manufactures the Z8530 as the Am85C30. Call
1-800-222-9323 and ask for the Am85C30 Data Sheet and the Am8530H/Am85C30
Technical Manual. The AMD CMOS part has some enhancements useful for high
speed HDLC operation.

Intel also manufactures the Z8530 as the 82530. You can call them at
1-800-628-8686 and ask for their data sheet, but I found the information from
AMD more useful.

I obtained 8530 literature from both AMD and Intel just a couple of weeks
ago, so both of the 800 numbers should still be good. Most hobbyist component
vendors sell Z8530 or Z85C30's. Newark Electronics catalogs the AMD CMOS part.

Another device you might investigate is the 82520/82525/82526 series from
Siemens. (AMD used to make these, too, but I don't know if they still do.)
These have selectable bus structures that match either Intel 8080 or Motorola
6800 bus arrangements. The latter would probably match the 6502 in your Atari
better.

A third possibility is to throw away the Atari :-) and use one of the new
microcontrollers with integrated HDLC. Intel sells the 80C152 and Zilog has
a device (whose part number escapes me at the moment) that includes Z80, glue,
clock generator, and half a Z8530. National Semiconductor catalogs a COP1600
variant with integrated HDLC, but if I remember right it doesn't have the DPLL
for clock recovery.

Date: 12 Sep 1994 19:27:57 -0500
From: ihnp4.ucsd.edu!newshub.nosc.mil!crash!news.sprintlink.net!bga.com!bga.com!
nobody@network.ucsd.edu

Subject: JNOS 1.10f lockups
To: ham-digital@ucsd.edu

In article <5K8QuT+.kb0kqa@delphi.com>, Matt Werner <kb0kqa@delphi.com> wrote:
>I've tried turning the watchdog timer on, especially because the system is
>a remote system, but it's been down for two days now, and the watchdog timer
>is 300 seconds!

The watchdog timer works by detecting that the timer process is blocked
when the hardware timer interrupt ticks. If timer interrupts are blocked
(usually because all interrupts are off), then the watchdog code doesn't
run.

>   Any other suggestions on how I can keep it online without
>putting it on a timer to reset the computer every day? It seems like it will
>run for a few days before it locks, and it usually locks up with plenty of
>memory (50k or so, but DOS is loaded low). Would it help to load DOS high,
>or wouldn't it really matter in this case? Any suggestions?

If you load dos high then you will get some extra memory. What is going
on when it locks up? Does your caps lock key work? Can you type more
than 16 charactesrs without getting beeps? Can you use the 3 finger
salute or do you have to press the hardware reset button?

One thing you can try is reducing features. Compile out code you don't
need, don't start more sessions at the same time than you need, keep
an eye on sockets where the other end died, etc. Consider doing a
software exit/restart or reboot every x hours as a preventitive measure.

Another choice that is equally drastic software wise but is easer
on the hardware would be to put a connection that activates the
reset line. You could even hook it up to do it remotely (on 440
or above) instead of on a timer. Or make a hardware watchdog that
activates the reset if you don't write to it within say 5 minutes
and add that to the timer loop.

milton
--
Milton Miller KB5TKF miltonm@bga.com

Date: 9 Sep 94 22:01:00 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!wa4mei!totrbbs!steve.diggs@ames.arpa
Subject: mocom 35 on packet
To: ham-digital@ucsd.edu

-> Newsgroups: rec.radio.amateur.digital.misc

-> Subject: mocom 35 on packet
-> From: dave.baumwald@woodybbs.com (Dave Baumwald)
-> Message-ID: <93.2333.7582.0NFB30E6@woodybbs.com>
-> Date: Thu, 8 Sep 94 05:45:00 -0500
->
-> Has anyone ever used a Motorola Mocom 35 on packet? If so have you
-> had any problems? Thanks for any advice!

We use a Mocom 35 as our main 1200 baud digi here in Atlanta, W4Q0-1. It
is an excellent performer.

Regards,
Steve Diggs
President, East Atlanta LAN

Top Of The Rock BBS - Lilburn, GA   SYSOP: Steve Diggs
UUCP: totrbbs.atl.ga.us   Snailmail: 4181 Wash Lee Ct.
Phone: +1 404 921 8687   Lilburn, GA 30247-7407

Date: Sun, 11 Sep 94 21:14:37 MST
From: ihnp4.ucsd.edu!newshub.nosc.mil!crash!news.sprintlink.net!primenet!stat!
david@network.ucsd.edu
Subject: Using internet for DX spots
To: ham-digital@ucsd.edu

rapp@lmr.mv.com (Larry Rappaport) writes:

> david@stat.com (David Dodell) writes:
>
> > rapp@lmr.mv.com (Larry Rappaport) writes:
> >
> > > Internet which aren't all that common. Another way might be via IRC (Inte
> > > Relay Chat) which allow users to connect to an IRC server when interested
> > > and look for a channel called DX or some such. Using IRC would mean that
> > > anyone with a cheap interactive account could use it, it could be used bo
> >
> > I think this is an excellent idea ... this would allow something to be
> > immediately in operation with a resource that already exists
> >
> > david wb7tpy
>
> Well, actually, on further thought, it isn't so excellent. :) How do you keep
> non-hams out of it? Anybody checking in and posting will end up making a
> transmission, which I don't think is legal. :(

I think the suggestion was to use IRC as a DX spot on it's own, not to
gate it to the radio. Nothing illegal about that.

Editor, HICNet Medical Newsletter
Internet: david@stat.com   FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

Date: Sat, 10 Sep 1994 11:17:00 PST
From: ihnp4.ucsd.edu!sdd.hp.com!swrinde!howland.reston.ans.net!
europa.eng.gtefsd.com!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!mala.bc.ca!
news.island.net!ham!emd@network.ucsd.edu
Subject: Using internet for DX spots
To: ham-digital@ucsd.edu

david@stat.com (David Dodell) writes:

>rapp@lmr.mv.com (Larry Rappaport) writes:
>
>> Internet which aren't all that common. Another way might be via IRC (Internet
>> Relay Chat) which allow users to connect to an IRC server when interested,
>> and look for a channel called DX or some such. Using IRC would mean that
>> anyone with a cheap interactive account could use it, it could be used both
>
>I think this is an excellent idea ... this would allow something to be
>immediately in operation with a resource that already exists
>

What's even more astounding is that packet hasn't taken advantage of the
many inexpensive or free DOS based uucp news and mail forwarding systems
to allow for, for example, newsgroups instead of having every subject in
one main group. Waffle, for example, ought to work very well over Packet,
and runs on any DOS machine, even XT's.

--
emd@ham.island.net (Robert Smits, VE7EMD Ladysmith BC)

   " I admire Ted Kennedy. How many 59-year-olds do you know who
     still go to Florida for spring break?" - Pat Buchanan

Date: Sat, 10 Sep 1994 12:16:30 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!
swiss.ans.net!solaris.cc.vt.edu!news.duke.edu!concert!hearst.acc.Virginia.EDU!
murdoch!brain.neuro.@@ihnp4.ucsd.edu

Subject: Using internet for DX spots
To: ham-digital@ucsd.edu

In article <Cvv7K2.LD7@cscsun.rmc.edu>,
David Tiller <dtiller@cscsun.rmc.edu> wrote:
>Has anyone given any thought to using the internet to transport DX cluster
>spots? I was listening to my local node last night, and it seemed to me
>that that sort of information would lend itself to long haul tunnelling
>through the internet. It would also be neat to have a server available
>online to see DX during the day...:-) I was thinking maybe a slick X
>interface, or a WWW page with a map and all.... What do you think? Would
>it be worth writing some code and sticking a TNC in the air? To start with
>we could just have one large collection of "listens" without retransmitting
>spots. That could be added later. Naturally you could choose which regions
>and servers you'd want to accept..Here in Va I don't care about MooseJaw's
>DX!!!

I too would love to have the capability to get spots on Internet. I have lousy access to PacketCluster anyway but great access to Inet. I'm surprised it hasn't been done yet. Problem is getting the code writted and into the field and then what's the incentive for people to post spots?

=+=

Ned Hamilton   AB6FI   NTC   Department of Neurosurgery
nedh@virginia.edu   University of Virginia

=+=

Date: 11 Sep 1994 03:50:22 GMT
From: ihnp4.ucsd.edu!news.cerf.net!nntp-server.caltech.edu!netline-fddi.jpl.nasa.gov!elroy.jpl.nasa.gov!swrinde!howland.reston.ans.net!vixen.cso.uiuc.edu!prairienet.org!k9cw@network.ucsd.edu
Subject: Using internet for DX spots
To: ham-digital@ucsd.edu

In a previous article, esh6n@brain.neuro.virginia.edu (Ned Hamilton) says:
>
>   Problem is getting the code writted and into the
>field and then what's the incentive for people to post spots?
>

I think your last point is the most important issue. How many of us have a full time link to internet while sitting in front of our radios? Without people sitting next to radios, who is going to generate these DX spots? And if you are at work or the university lab, are you in any position to do something about a new country that is spotted someplace else in the country? If you are at work, what DX spots can you contribute? PacketCluster only works when we have people tuning the bands and sending DX spots.

Using internet to link remote cluster nodes makes sense to me if there is no direct radio path. Sending those spots to users dialed in to internet does not.

73, Drew
--
-----------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
-----------------------------------------------------------------*

Date: 12 Sep 94 16:03:47 -0700
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!news.cs.utah.edu!cs.utexas.edu!swrinde!sgiblab!uhog.mit.edu!news.mtholyoke.edu!news.byu.edu!yvax.byu.edu!barrusc@network.ucsd.edu
Subject: VHF packet "talk" range
To: ham-digital@ucsd.edu

     Can anyone tell me if it is possible to "talk" via packet VHF over long distances by linking digipeaters? What is the longest distance?

     I am looking to getting into packet and was just curious. 73's

Craig

Date: 13 Sep 94 03:40:01 GMT
From: gonix!russell@uunet.uu.net
Subject: WNOS memory leak?
To: ham-digital@ucsd.edu

    I'm running WNOS (Title line WNOS.4A9.DB3FL) on my packet machine, and I love it, but it seems that the memory just continually goes down when I leave the machine on for any length of time. I've tried shutting the trace off, set the ax heard list to the last 25 only, etc etc, but still it just goes down.

    Is there a memory leak somewhere, or is the system just letting things go until it gets low enough, at which point it will garbage-collect and free things up? I haven't left it on and watched it to see. I'd like to set up a remote routing system, but not if it's going to reboot quite often due to memory problems.

                    Tim, russell@gonix.com

n0zhy@wd0har.#ene.ne.usa.noam

Date: 10 Sep 1994 23:30:10 GMT
From: agate!spool.mu.edu!news.clark.edu!netnews.nwnet.net!news.u.washington.edu!kenth@ames.arpa
To: ham-digital@ucsd.edu

References <34mb4g$7n9@news.u.washington.edu>, <D>,
<ftpam.46.003001AE@aurora.alaska.edu>ws
Subject : Re: HDLC protocol chips

thanks for all your responses. I've been able to find the stuff I need

kenth@u.washington.edu

Date: 12 Sep 1994 20:55:06 GMT
From: sunic!isgate!news.rhi.hi.is!ddietz@uunet.uu.net
To: ham-digital@ucsd.edu

References <RSNYDER.94Sep9154242@boot108a.astro.ge.com>,
<34st8u$qgk@tequesta.gate.net>,
<rsnyder-1009941711490001@wintermute.motown.ge.com>
Subject : Re: KPC-9612/Starting out

In <rsnyder-1009941711490001@wintermute.motown.ge.com> rsnyder@astro.ge.com (Bob Snyder) writes:

>In article <34st8u$qgk@tequesta.gate.net>, anto@gate.net (Nigel Kirlew) wrote:

>> The KPC-9612 would be my choice if I were buying today. The ability to
>> operate 1200 and 9600 baud simultaneously is a big plus. May not be
>> important to you, but it's really like having two independent modems in one
>> box.

>It might be important to me.... I don't know yet. :-) I would probably
>tend to want 9600, if it's in much use. But if it's not much use to me,
>and isn't likely to be such in the near future, would I be better off
>getting a 1200 baud TNC now, and wait and get something like advanced
>units later....

If you can afford the cost of the KPC-9612 now, then buy it now, or you'll regret it later. The point here is that it does have both 1200 and 9600 baud capability, and they can run simultaneously. This means that you could get started now, using only the 1200 baud port, and easily move up

to 9600 baud with another rig later on.

>> For 9600 baud, they all require precise deviation adjustment. You're
>> also not likely to run 9600 baud with your HT (not a trivial mod). I see
>> another radio in your future :-)

>Oh, goody. What budget? :-) What should I be looking for in a new rig?
>I know newer rigs can switch faster, which is a major plus, but what about
>the "packet ready" radios? Are those worth the money? What is it?

>Can you attach the KPC-9612 to a HT and run it at 1200 anyway? I have
>visions of plugging a 9-volt into the TNC, and taking my HT and Newton out
>and run packet away from the apartment. :-)

This is exactly what the KPC-9612 and older KPC-3 are really good for.
Running low power, in the field, on batteries only.

>Also, can the KPC-9612 do HF packet?

A resounding NO, comes to mind here. This is only good for vhf and above
due to the modulating frequency shift size. It results in too large a
bandwidth for use on hf bands...

>Bob N2KGO
>--
>Bob Snyder
>rsnyder@astro.ge.com

Hope this helps.

73 de Don, n3kfh /tf8
n3kfh@centrum.is

Date: Sat, 10 Sep 1994 17:11:49 -0400
From: netnews.upenn.edu!news.drexel.edu!news.ge.com!wintermute.motown.ge.com!
user@RUTGERS.EDU
To: ham-digital@ucsd.edu

References <1994Sep9.075319.26698@cc.usu.edu>,
<RSNYDER.94Sep9154242@boot108a.astro.ge.com>, <34st8u$qgk@tequesta.gate.net>edu
Subject : Re: KPC-9612/Starting out

In article <34st8u$qgk@tequesta.gate.net>, anto@gate.net (Nigel Kirlew) wrote:

> The KPC-9612 would be my choice if I were buying today. The ability to

> operate 1200 and 9600 baud simultaneously is a big plus. May not be
> important to you, but it's really like having two independent modems in one
> box.

It might be important to me.... I don't know yet. :-) I would probably
tend to want 9600, if it's in much use. But if it's not much use to me,
and isn't likely to be such in the near future, would I be better off
getting a 1200 baud TNC now, and wait and get something like advanced
units later....

> For 9600 baud, they all require precise deviation adjustment. You're
> also not likely to run 9600 baud with your HT (not a trivial mod). I see
> another radio in your future :-)

Oh, goody. What budget? :-) What should I be looking for in a new rig?
I know newer rigs can switch faster, which is a major plus, but what about
the "packet ready" radios? Are those worth the money? What is it?

Can you attach the KPC-9612 to a HT and run it at 1200 anyway? I have
visions of plugging a 9-volt into the TNC, and taking my HT and Newton out
and run packet away from the apartment. :-)

Also, can the KPC-9612 do HF packet?

Bob N2KGO
--
Bob Snyder
rsnyder@astro.ge.com

End of Ham-Digital Digest V94 #306
****